



return to the Garden

The Disciples guide to organizing community gardens

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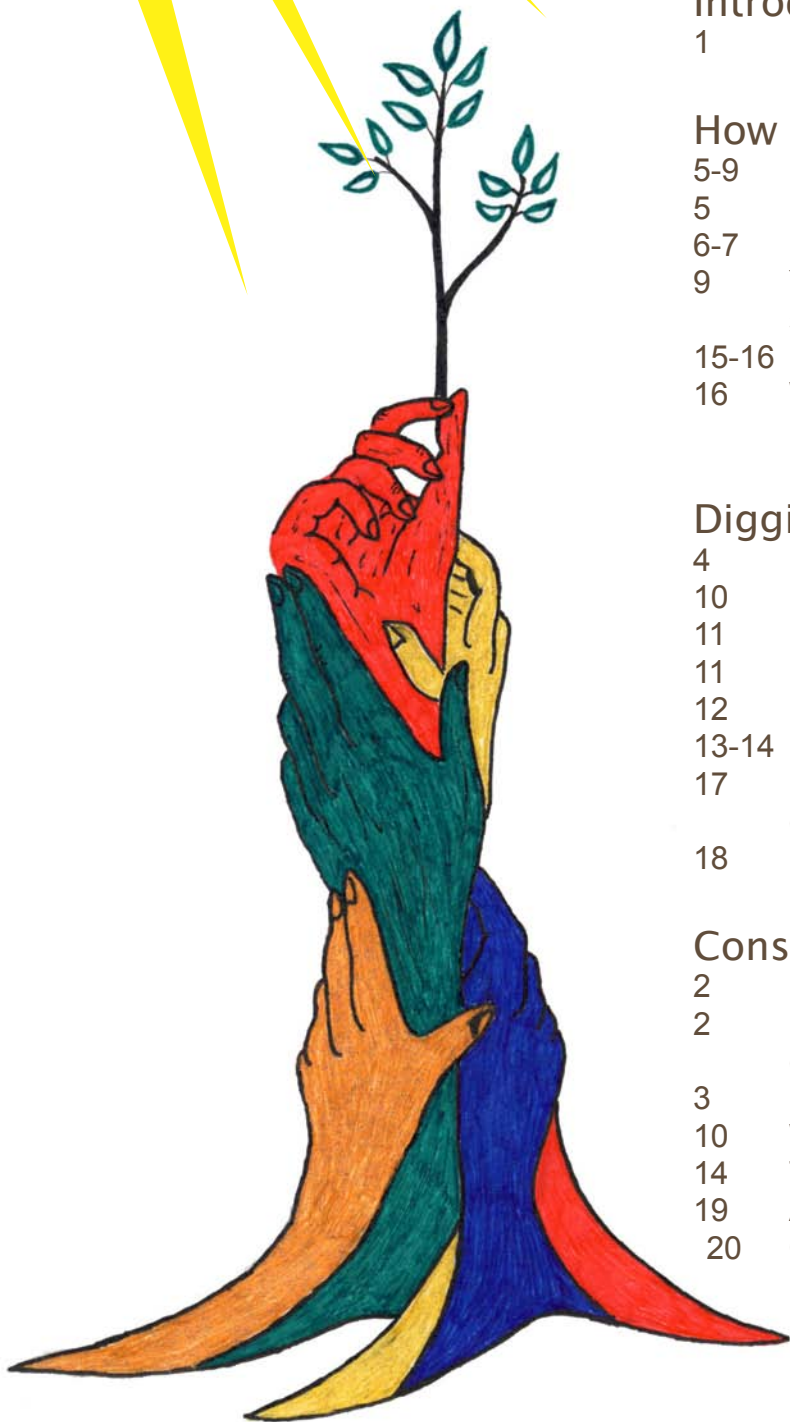
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Return to the Garden ...

For as the earth brings forth its shoots, and as a garden causes what is sown in it to spring up, so the Lord God will cause righteousness and praise to spring up before all the nations. Isaiah 61.2 (New Revised Standard Version)

by Angela Herrmann

As I reflect upon the scripture from Isaiah, it seems to me that through Return to the Garden, we are beginning to sow the seeds of a new garden: a garden grounded in the word of God, Jesus' teachings and the Church ... a garden that will sprout from the hearts of Disciples and grow into a community that will spread across North America and eventually around the world.

This garden will be the center of that new community, where people of all faith and cultural traditions will come together in the common language of the Earth.

The Earth, if we listen, is trying to tell us that we cannot continue to live as if we have no relationship with her. When we hear reports about degraded top soil; dying oceans, rivers and lakes; disappearing species; and changing climate; we have to stop and ask ourselves what is going on around us.

Soil, water, and all other life is connected to us and to the food we eat. To grow food, our industrial agricultural system is pouring thousands of pounds of chemicals onto the Earth each year ... all in an effort to produce the perfect tomato or ear of corn and to reduce hunger. Some companies are even changing the genetic structure of our food. Did we not already have the gift of the perfect tomato and ear of corn ... with more than enough to feed everyone?

We are dependent on the health and vitality of the Earth. When we return to the garden, we will begin to appreciate the systems on which we depend, such as weather and precipitation and decomposition. We'll discover through the language of the Earth that everything we ever needed is quite possibly already in our own back yard ... or in the empty lot down the street. With the input of some sun, rain and community, everyone will eat. And isn't eating about gathering around the Table in praise and celebration of all life?

Won't you consider a Return to the Garden?

About this resource

We have created this resource to help your congregation start a community garden on or near your church property. In addition to the practical ideas on organizing the garden on pages 4 to 8, we've added a number of articles on issues related to gardening and local food.

We welcome your comments and suggestions for future updates to this resource. 🌱

Herrmann holds an M.A. in Earth Literacy and is on staff with Disciples Home Missions of the Christian Church (Disciples of Christ). When not working, she participates in a community garden in her neighborhood.

Credits ...

Return to the Garden, which was launched at the 2005 Portland General Assembly, would not have been possible without the initial support of Week of Compassion and Disciples Home Missions (including the Office of Disciples Volunteering). Just as all life happens in community, so did this resource. Special thanks to Rebecca Bell, White Swan, Wash., for designing the Return to the Garden art and to David Bell, Yakama Christian Mission, for planting the seeds for this project. A note of appreciation goes to the writers who contributed to this resource and the people who helped with proofreading and editing. Angela Herrmann, Disciples Home Missions' coordinator for Environmental Education and Advocacy; Christian Church (Disciples of Christ), compiled the content. 🌱



Connect with the Earth, Community and Table

The Earth

We have stripped the Earth of vegetation, cloaked it in concrete, planted buildings and signs on it and named it progress. The majority of the U.S. population now lives in cities and breathes dirty air. We know the Source of Life is out there ... but how can we tap in to it? Through community gardening.

The Community

What is community? Does it include only like-minded individuals of similar ages, economic and cultural backgrounds? Or does the Disciples community aspire to include a rich tapestry of people who are elderly and young, rich and poor, representing all parts of the Earth? Perhaps we might even stretch the concept of community to include more than humans? After all, the multi-legged, winged and rooted also call planet Earth home and without them, we could not exist. And we all share the common bond of the life-giving Spirit of God.



The Table

Tim Vivian said, “Perhaps, indeed, Creation is the sacrament, without which the others, dependent as they are on the things of the earth (water, bread, wine, oil), could not exist. If we reserve consecrated bread and wine and kneel before it, why should we not preserve the world with the same reverence? [Wendell] Berry said ‘We depend upon other creatures and survive by their deaths. To live, we must daily break the body and shed the blood of Creation. When we do this knowingly, lovingly, skillfully, reverently, it is a sacrament.’ A sacrament is a gift of and from God, but it cannot last or even exist without human hands to hold and nurture and shape it.” (Tim Vivian. “Reflection:

Building and Upholding the Blessed Community: In Praise of Wendell Berry”. *Anglican Theological Review*, Fall, 2001.)

Discover what is possible when Disciples create community gardens

The issues related to the environment are so complicated that people don't fully understand how their day-to-day choices can have social and ecological consequences, at home and around the globe. However, most people are familiar with gardens. When you create a community garden, you will discover that:

- Your garden becomes a centerpiece of your community and neighborhood;
- You'll incorporate educational opportunities on issues of poverty, hunger, environmental and social issues into your congregation's work;
- You'll develop opportunities for leadership for social and ecological activism;
- You'll create opportunities for intergenerational and intercultural sharing in your garden;



- You'll plant the seeds of food security; and
- You'll forge partnerships with local food banks and farmers markets.

As culture continues to fragment into urban, suburban, inner-city, and rural communities, people no longer have a shared cultural experience, or even a common language about their place in this world. Returning to the land—by way of a garden—changes that. Whether you're growing flowers in Los Angeles or squash in Des Moines, reconnecting with the Earth connects everyone with communities and with each other. In reconnecting, gardening serves to enhance the understanding of the Earth community in the form of an increased ecological consciousness.

Gardening as if ...

"... they shall not plant and another eat ..." Isaiah 65:22 (New Revised Standard Version)

by Angela Herrmann

How many times have we taken for granted that we can drop by the grocery store to pick up bread, milk, and eggs? Have we considered:

- Where the food originated: locally or thousands of miles away?
- How it was produced: organically or with petroleum-based machines and chemicals?
- Who harvested it: fairly paid farmers or low-paid, non-citizen migrant workers?

As I considered the grocery store and the verse from Isaiah. "... they shall not plant and another eat ...," I wondered about my relationship with the food I eat, those who harvest the food, and the Earth.

Most of the food I eat is planted and harvested by people I'll never meet. Some people I know couldn't grow a tomato or raise a chicken if their lives depended on it (I'm not far behind!). Perhaps that's what troubled me: what if our lives suddenly depended on our ability to cultivate our own food? Many of us wouldn't survive long!

Which brings me back to the grocery store, a symbol of our profound disconnection with the Earth. We note the passing of seasons, not by changes in weather patterns, plant cycles, or animal behaviors, but instead by sales of chocolate rabbits,

scary costumes and artificial trees. Consequently, unprecedented ecological problems, such as water contamination, air pollution, and climate change, seem too big to grasp because we have lost our physical and spiritual connection with the Earth.

What would happen if we learned to grow a tomato or raise a chicken? Is it possible we could learn to reconnect with the Earth and with each other by planting a garden? And what if we planted community gardens on the property of churches, temples, mosques, synagogues, or zendos? We could create places where all who speak different languages of faith, but understand the universal language of life, could gather.

In understanding the natural processes on which



our lives depend, the community garden would be an entry point into an environmental consciousness ... a way of thinking globally by acting locally. Planting, harvesting, and eating together would lead to friendships and greater understanding of each other's faith traditions. Then together we could begin to deal with the ecological mess our forebears and we have unwittingly created, which will require an unprecedented

interfaith effort. Then perhaps the legacy we leave our children and grandchildren is the unconditional abundance of the Earth rather than the prospect of empty grocery store shelves. They deserve nothing less. ♻️

Felege Hiywot: Looking for direction to life

On Indianapolis' near west side, only blocks from Gleaners Food Bank, a nearly forgotten patch of land is teeming with life. Two century-old, wood-frame houses, in the midst of makeovers, are remnants of what once was a thriving neighborhood. They are surrounded by several acres of grass, anchored with trees, including a catalpa and cottonwoods. Across the street, a hulking vacant brick building that possibly was once a school, stands as a reminder that this neighborhood's best days have passed and its residents have moved on, a neighborhood that's somehow lost, looking for direction.



That is until the idea of the Felege Hiywot Center and its director, Aster Bekele took root in 1975, a seed of sorts that has lain dormant until 2004. The Felege Hiywot's goal is to be known for its gardening program in Indianapolis. Their work also includes helping second-generation Ethiopian children embrace their heritage; caring for Ethiopian orphans; and contributing to the surrounding community ... work that's grounded in the garden and the Bible.

Drawing from Jesus' words from Matthew 25:40: "Truly I say to you, as you did it to one of the least of these my Brethren; you did it to me," the Center serves Indianapolis urban youth and second generation Ethiopians. Bekele serves to bridge the cultural divide between these two communities. Bekele, who was born in Ethiopia, has lived in the United States for 31 years, becoming a citizen in 1981. She wants only to give back to a community that has given her so much.

"Why am I doubting ... When am I going to learn it really is a miracle here," says Bekele when she

talks about what's happening at the Center, which opened at its Sheldon Street location in 2004. "When we have a need, before we go out looking for it, it shows up." Like the 160 people from Lilly Day of Service, who in one day last May, transformed part of the vacant lot into a vegetable garden. Or the many other people who have dropped in over time, adding their transformative touches, from adding a rain collection system to re-siding the houses, to planting early greens that are a favorite of area residents.

According to Bekele, "We don't start with Bible study, we don't go in and tell the children what to think. When a child asks why we're here [in this neighborhood], that's our opening. We don't tell them how to behave, we model it. We give them what they need."

Sometimes what they need is love or a meal or direction. While Felege Hiywot means looking for direction to life, clearly, Aster's direction is clear: "All of this, God is leading it." 🌱



How to organize your community garden

Your congregation has decided it wants to start a community garden. So now where do you begin? With a task force!

Task force

Before selecting a task force, make sure a real need or desire for a garden exists. Consider that if the garden is intended to benefit a particular group or neighborhood, it is essential that the group be involved in all phases of the planning. To enhance the success of your community garden, your plans should include building and working with networks outside of your congregation. Consider including representatives from your city government, neighborhood association, food-bank, and farmers market. Can you think of others who should be included? Now you are ready to organize a meeting of interested people. Make sure you choose a well-organized garden coordinator. If needed, form action-groups to accomplish specific tasks such as fund raising, youth activities; maintenance; construction (if necessary); and communication.


Sponsorship

Consider finding an individual or organization to sponsor your community garden. Sponsorship can be a tremendous asset to securing contributions of land, tools, seeds, fencing,

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Community Garden timeline for churches: plan now for next year

Autumn	Winter	Spring	Summer	Autumn
Seek approval from church board	Set meetings to make a diagram, plan garden, and assign work	Clean, prepare soil or build and fill beds	Weed and water as needed	Harvest and share
Select space for garden	Determine garden structure: shared or individual beds	Spread mulch	General plant maintenance such as "deadheading," fertilizing, mulching and composting	Remove plants and add to compost pile 
Test soil for lead	Buy seeds	Buy seedlings	Plant and water	Fertilize
Recruit volunteers			Harvest and share	Schedule winter meetings, update diagram, and plan for spring.
Do preliminary preparations of bed(s)				

See www.arborday.org/media/zones.cfm to determine your plant hardiness zone. See The Openlands Project, www.openlands.org/urbangreening.asp?pgid=108, for a complete schedule. Learn more about Return to the Garden at www.discipleshomemissions.org/ReturnToTheGarden/index.htm or call Disciples Home Missions at (888) 346-2631.



soil improvements or money, all of which are vital to a successful community garden. Some community gardens can provide most of their provisions through fees charged to the membership; but for many, a garden sponsor is essential. Schools, citizens groups, private businesses, local parks and recreation departments, and even other congregations are all potential supporters. Community Development Block Grants are sometimes available through your municipality.

Garden site

Decide where your community garden will be. In many cases, it will be on church-owned land. However, if your congregation does not own extra land, consider looking for a nearby vacant lot for your garden. Then identify the owner of the land to see if they are interested in your gardening project. If gardening on non-church land, you should then obtain a written lease or agreement from the property owner. Try and get a lease or agreement that allows the space to be used at least three years.

Some garden site considerations include:

- Make sure the site gets at least six full hours of

sunlight daily (for vegetables).

- Test the soil in the fall for nutrients and heavy metals.
- Check for availability of water from a nearby building or hydrant.
- Research past uses of the land. Is any contamination present?
- Will your congregation need additional insurance?



A note about insurance: It is becoming increasingly difficult to obtain leases from landowners without public liability insurance. Garden insurance is a new thing for many insurance carriers and their underwriters are reluctant to cover community gardens. It helps if you know what you want before you start talking to agents. Two tips: you should probably work with an agent from a firm that deals with many different carriers (so you can get the best policy for your needs)

and you will probably have better success with one of the 10 largest insurance carriers, rather than smaller ones. ... more, top of page 7

Planning a garden? Listen first ... what you learn might surprise you

by David Bell

Community garden. With those two spoken words, my friends looked at me as if I were nuts. In their world, perhaps so, I certainly do not have a clue what it means to spend a full day working the fields and then have someone ask if I would like to spend my spare time growing more row crops! Again, I learn that because of my life history, where and how I was raised, I am at a loss as to what it means to live in circumstances different from my own.

Those raised eyebrows early last fall began a process of questioning how community gardening might look in my community. For people who spend their lives working field crops, the idea of spending their evening hours doing more of the same is not at the top of their list of fun. On the other hand, while vegetables and fruit are readily available, meat is not. Hmm, if vegetables are not needed and meat is, then

how might community gardening look under these conditions?

A little listening goes a long way. Each community has different needs and desires. What works for one people may not necessarily work for another. In our community, the question of gardening kept leading to the answer of meat. As a result, last year, Yakama Christian Mission started working toward putting 15 acres under irrigation and planting pasture grasses.

Community gardening in the White Swan community looks a little different than many because at the heart of this garden are animals rather than plants. Unlike vegetable gardens, though, it takes a few years to prepare a garden of animals. First is developing pasture. Rotational grazing is necessary to have the

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Who will the garden serve?

Consider the populations in your congregation and community who might benefit from your gardening efforts. Examples include children, youth, seniors, special populations, and people who just want an alternative to trash.

What will you grow?

Vegetables? Flowers? Trees? Herbs? A combination?

Communication

Most likely, you will use your congregation's mailing address and central telephone number(s). At least three people should be familiar enough with the garden to field questions. A telephone tree might be helpful.

Budget

To assist in the development of the budget, create a list of items needed for the garden based on the design that includes tools, supplies, materials and services like tilling if necessary, fencing, water lines, lumber for beds and signs. Come up with a budget for these things and then see what you can get donated or funded. Survey your neighbors - you will be surprised what they can provide! If your community garden has a budget, keep administration in the hands of

largest number of animals on the fewest number of acres. The Mission has been in the process of dividing 15 acres into multiple paddocks. Multiple paddocks, in turn, allow for rotating animals from one pasture to the next before grass is eaten below its optimal energy level allowing for quick regrowth.

Soil testing occurs next so a grass seed best suited for the soil type can be chosen, planted, and nurtured for growth. This system allows the land to reflect the diversity of the original grasslands nature of the valley, where grasses best suited to natural soil conditions thrive. Not surprisingly, soil type does not stop where one decides a paddock should end, which allows multiple grass types to occur in any one paddock.

After pasture development comes the animals. Currently, the Mission raises a goat sheep mixture. Each animal has a natural affinity to a different grass,

several people.

Participation

Consider who will be involved in the garden. Are there conditions for membership (residence, dues, agreement with rules)? How will plots be assigned (by family size, by residency, by need, by group or team, such as youth or elderly)? How large should plots be (or should there be several sizes based on family size, crop, or other factors)? How should plots be laid out? If your congregation charges dues for a plot, how will the money be used? Who will decide? What services, if any, will be provided to gardeners in return? Will the group do certain things cooperatively (such as turning soil in the spring, planting cover crops, or composting)?

Other questions to consider include:

- When someone leaves a plot, how will the next tenant be chosen?
 - How will you deal with possible vandalism?
 - Will there be a children's plot?
 - Will the gardeners meet regularly? If so, how often and for what purposes?
 - Will gardeners share tools, hoses, and other items?
 - How will minimum
- ... more, top of page 8



and thankfully, weeds. Allowing for even grazing throughout the pasture and a natural weed abatement program occurs at the same time!

A side benefit to carefully listening to the soil is the wildlife. Wildlife, like ourselves, enjoys the availability of a diversity of food types. By investing in multiple grasses, wildlife has a tendency to make their homes in and on the fringes of the pasture.

An animal garden. Probably a different way of thinking about garden, but a garden that comes from listening to people, land, and animals. Perhaps not one that can be duplicated in the inner city, but maybe one that can be thought of in our rural communities of poverty. 🌱

Bell serves as director of the Disciples Mission Center, Yakama Christian Mission, White Swan, Wash.

maintenance (especially weeding) be handled both inside plots and in common areas (such as along fences, in flower beds, and in sitting areas)?

- Will there be a set of written rules which gardeners are expected to uphold? If so, how will they be enforced?

Garden management

To offer a high-quality, community garden program, good management techniques are essential. Included here are the main ideas to consider in management, along with several different ways to carry them out.

Having written rules is very important with established groups as well as new gardeners, since they spell out exactly what is expected of a gardener. They also make it much easier to handle burned out volunteers should the need arise. (Visit the American Community Gardening Association Web site for samples—see end of this article for address.)

Preparing the site

For a successful gardening experience, the site must be prepared. If necessary, do any cleanup work. Begin planning by drawing a design of the space. Determine what resources you might need, and see what free materials you can gather. Begin organizing volunteer work crews and make sure you have a job for everyone, young and old, then schedule workdays. Consider how the land will be prepared. By plowing? Sheet mulching? Who will do this work?

Where will tools be stored? Include plans for a storage area for tools and other equipment. The storage area might be a good place to post a bulletin board announcing garden events and messages.

How will the garden be organized? Will individual gardeners have their own plots or will teams of gardeners share responsibilities for particular crops? Your response will determine plot sizes. Once the plots are outlined, mark them clearly with gardener or team names. Be sure to save a space for the compost area! Consider placing flower or shrub beds around the visible perimeter of the garden to promote good will with non-gardening neighbors, passersby, and municipal authorities.

Designing the site

Draw a diagram of where each element should be. Research the kinds of plants and trees that do well in the city with low maintenance and add these to your

diagram. Consider structures like benches, arbors, tables and artwork like statues and murals. Be sure to include a compost area to collect plant refuse and to create your own garden fertilizer.

Planning the work

Create a list of tasks and a schedule or time line. Work out a system so garden volunteers can do a share of the work. Look ahead a few years and think about how to phase in planting and building projects. Don't try to do everything the first year, but start with the "skeleton" of lot clearing, bed and soil installing, and a few plants in year one and build up from there.

Be prepared to do the following tasks:

- Winter—Plan and hold several meetings to plan garden and assign work (Time: one or two meetings a month).
- Spring—Clean, prepare soil or build and fill beds, spread mulch, purchase seeds and plants, plant and water. (Time: several long work days and then at least once-a-week care to water, weed. Time depends on size of lot and number of volunteers!).
- Summer—Weeding and watering as necessary, general plant maintenance such as “deadheading,” fertilizing, mulching, and composting (Time: at least two times a week for two hour shifts).
- Fall—Harvest, remove plants and add to compost pile, fertilize, plan winter meetings, update garden journal and garden diagram to help when planning for next spring. (Time: two or three times a week in two hour sessions).

One or two hours of volunteer work a week can accomplish a lot of planting and weeding and of course harvesting at the end of the summer and fun all season long!

Troubleshooting

Vandalism is a common fear among community gardeners. However, the fear tends to be much greater than the actual incidence. Try these proven methods to deter vandalism:

- Make a sign for the garden. Let people know to whom the garden belongs and that it is a neighborhood project.
- Fences can be of almost any material. They

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serve more to mark possession of a property as to prevent entry, since nothing short of razor-wire and land mines will keep a determined vandal from entering. Short picket fences or turkey wire will keep out dogs and honest people.

- Create a shady meeting area in the garden and spend time there.
- Invite everyone in the neighborhood to participate from the very beginning. Persons excluded from the garden are potential vandals.
- Involve neighborhood children in learning gardens. They can be the garden's best protectors.
- Plant raspberries, roses or other thorny plants along the fence as a barrier to fence climbers.
- Make friends with neighbors whose windows overlook the garden. Trade them flowers and vegetables for a protective eye.
- Harvest ripe fruit and vegetables on a daily basis. Red tomatoes falling from the vines invite trouble.
- Plant potatoes, other root crops or a less popular vegetable such as kohlrabi along the sidewalk or fence. Plant the purple varieties of cauliflower and beans or the white eggplant to confuse a vandal.
- Plant a "vandal's garden" at the entrance. Mark it with a sign: "If you must take food, please take it from here."



plots specifically for children. The "children's garden" can help market your idea to local scout troops, day cares, foster grandparent programs, church groups. Consider offering free small plots in the children's garden to children whose parents already have a plot in the garden. A fun type of children's garden is a pizza or salsa garden, where they grow pizza topping or salsa ingredients.

Problems and solutions

Choose bylaws carefully so you have procedures to follow when members fail to keep their plots clean and up to code. A well-organized garden with strong leadership and committed members can overcome almost any obstacle. 🌱

For this and other community gardening resources, visit the American Community Gardening Web site:

<http://www.communitygarden.org>.

American Community Gardening Association
<http://www.communitygarden.org/starting.php>

Openlands Project (Chicago), www.openlands.org/

Note: Resources used with permission of ACGA and Openlands Project.

Children's Plots

Children included in the gardening process become champions of the cause rather than vandals of the garden. Therefore you may want to allocate some

You want to get your hands dirty but you're not sure where to begin

You've decided to plant a garden, but there's a problem: you have never planted a garden before. You might even confess to feeling squeamish at the thought of touching a worm. So what do you do?

Begin by finding out who gardens in your congregation, ask them questions, and even offer to help with their garden. Hands-on learning at its best. Another great way to learn about gardening is to enroll in a Master Gardener program. Available in most U.S. states and several Canadian provinces, the Master Gardener program offers would-be gardeners a sur-

vey of horticultural topics. Topics include soils, plant nutrition, plant science, plant diseases, weeds, animal damage, pest management and fruit, vegetable and flower gardening. The course fee is low, and sessions are usually held weekly or bi-weekly for eight to 10 weeks. More at http://www.ahs.org/master_gardeners/

If you can't find a Master Gardener course near you, you can explore online training through the Horticulture Gardening Institute, <http://www.learn2grow.com/>. 🌱

Where does food come from?

by James Bailey

- Is it magic?
- Where does milk come from?
- How do peanuts grow?
- Does water have anything to do with the beans we eat?
- What is a steer?
- Where does our food come from?

These are some of the questions children and many adults have asked California Disciple Jim Bailey about agriculture during his career as a high school agriculture teacher. Ten years go, the staff members at the Orange County Fair set out to answer these questions. They had a vision of trying to give young people an idea of what it takes to produce or grow the things that make a McDonalds hamburger.

From these questions, Centennial Farm was born: a place where school children and the general public could observe food and fiber growing on a farm.

From its creation in 1989, Centennial Farm has expanded to four acres of vegetable and flower crops with a half-acre dedicated to farm animals. Open daily, tours of the farm teach children where food and fiber comes from, how it is raised or grown and how crops and animals are used as an agricultural commodity. In turn, children realize how agriculture affects their lives every day.

If you are in southern California and want to visit the Centennial Farm, call (714) 708-1618 or visit the farm at the Orange County (Calif.) Fairgrounds; 88 Fair Dr.; Costa Mesa, CA 92626.

If you cannot visit Centennial Farm, contact your local Extension Service for a list of hands-on farms in your area that offer similar experiences for children ... and adults!

Links to Extension offices around the country:
<http://www.csrees.usda.gov/Extension/>. 🌱

Bailey is a Disciple and retired agriculture teacher from Sunny Hills High School, Fullerton, Calif.

Get the lead out ...

According to Ohio State Extension Office resources, "paint with high lead content is estimated to be in 74 percent of all housing built before 1980." Consequently, soils adjacent to older homes and garages have an increased risk of lead contamination.

New gardeners can decrease their exposure to lead in the soil with a little common sense and knowledge about the land on which they want to garden. Neighborhoods near former or current industrial sites tend to have increased levels of lead. For example, Avanti, a lead smelting plant and Superfund site located on Indianapolis near south-west side, was the source of high levels of lead in the soil on property and around the neighborhood.

Properties near major roadways tend to have higher concentrations of lead in the soil because of the use of leaded gasoline, which was finally banned in 1996 by the Clean Air Act.

Experts report that lead can be found naturally in soil at 15 to 40 parts per million (ppm). The U.S. Environmental Protection Agency has determined that areas where children are play should not test higher than 400 ppm.

Mitigating the lead risk

As you plan your garden, conduct research to determine previous uses of the land. If a lead risk exists, test the soil before you plant your garden. Call your public health department for lead testing services or contact the National Lead Information Center Clearinghouse at (800) 424-LEAD to receive a list of certified laboratories.

If your lead levels are high, mitigation can include—from most expensive to least—bioremediation; phytoremediation, construction of raised beds, or planting a flower garden and selecting another site.

Resources on lead mitigation are found at:
www.epa.gov/ne/leadsafe/pdf/appendixC.pdf
www.extension.umn.edu/distribution/horticulture/DG2543.html
<http://www.ikecoalition.org/Lead/>. 🌱

Improve your garden's soil

The key to strong, healthy plants that are resistant to disease is soil quality and structure. As you begin your community garden, spending a little bit of time understanding the soil conditions at your site will lead to increased harvests down the road.

Some considerations include: texture, nutrients, soil tests, amendments, tilling, and raised beds.

Soil nutrients and pH

Soil contains many essential nutrients, including nitrogen (N), phosphorus (P), and potassium (K). Perhaps you have noticed the N-P-K designation on fertilizer products along with three numbers. The first number refers to the percent nitrogen, the second refers to the percent phosphate, and the third refers to the percent potash.

Composting is important because it contains each of these nutrients, along with many good microorganisms. Applying organic amendments, such as compost, is better for the soil quality and texture than packaged fertilizers ... and compost is free! Additionally, applying synthetic fertilizers

without knowing the nutrient composition of your soil is not a good idea. For instance, while nitrogen leaches out of the soil with water, phosphorus and potassium tend to persist longer.

Another consideration in soil quality, which will directly affect some types of plants you can grow is pH. Most plants grow fine in soils within the neutral pH range, 6.0 to 7.0. Soils above 7.0 are considered alkaline while soils below 7.0 are considered acidic. Most soils range from 4.0 (acidic or "sour") to 8.0 (alkaline or "sweet"). Soil pH also affects the availability of certain nutrients. At a neutral range, most nutrients are available to your plants. What happens when plants don't have ideal soil conditions? Blueberries, for example, prefer acidic soils, from 3.5 to 6, depending on the variety. If you plant blueberries in alkaline soil, their disease resistance will decrease, and they will become more vulnerable to insect pests.

A list of plants and their pH preferences can be found on the City Gardening Web site, <http://www.citygardening.net/pHveg/>.

Soil tests

A soil test can be done to determine the nutrient content of your soil. Tests are inexpensive and can be an important tool in the success of your gardening efforts. To find out how to collect soil samples and where to send them for analysis, contact your county extension service.

While you may want to work with a lab closer to you, A&L Great Lakes Laboratories, Inc., is a reliable lab with a relatively quick turnaround. They can be reached at (219) 483-4759. Their

address is 3505 Conestoga Dr.; Fort Wayne, IN 46808-4413 and on the Internet, www.algreatlakes.com/.



An alternative to sending soil samples to a lab is simply looking at the kinds of plants growing on your site. They offer a quick way to determine soil conditions. For

more information, review the article, "Weeds as Indicators of Soil Conditions," to determine what specific weeds prefer. The article can be found at: <http://www.purdue.edu/dp/envirosoft/lawn/src/pest/indicators2.htm>. 🌱

Experience a community garden

If you're not ready to start your own community garden, volunteer to help in an existing garden. Chances are you can find one in your neighborhood. Call your county's Extension office to find a community garden near your church or contact the American Community Gardening Association to find ACGA members near you, <http://www.communitygarden.org/> or (877) ASK-ACGA or (877) 275-2242. 🌱

Fertilizing: It is a numbers game

by Janice Wiese-Fales

You don't have to be a rocket botanist to know that a combination of perfect weather and perfect soil should yield a perfect garden. Of course, the addition of a diligent gardener to the equation—one who weeds and sends insects packing—is helpful.

Gardeners have no control over the weather. Perfect soil is another matter.

Nutrients and soil amendments can be added to less-than-perfect plots. Knowing how and when to give your soil a boost can be overwhelming. Don't let amending your soil be the obstacle that keeps you from gardening. You can always work up to it.

Perfect gardeners test their soil and amend it based on the results. I'm working up to that. Improving soil sensibly requires just a little basic knowledge.

Plants get the carbon, hydrogen, and oxygen they need from air and water. They rely on soil to provide nitrogen, phosphorus, potassium, and other essential elements. Each of these nutrients plays a specific role in plant development. Nitrogen is necessary for lush vegetative growth. Phosphorus fuels healthy root systems, fruit, and seed production. Potassium "conditions" the plant overall and is responsible for larger and more plentiful fruits.

A series of three numbers on commercially purchased fertilizers represents the ratio of these three essential nutrients in the product. A balanced fertilizer, such as one marked 14-14-14, provides an equal measure of all three elements.

Generally, chemical fertilizers show faster returns. Their water-soluble nutrients are readily available to plants. However, they do not have "staying power," and are a quick fix that does not improve the soil.

I prefer adding nutrients organically. I do this primarily through the addition of manure and compost – decomposed organic materials – to my gardens. Microbes in the soil break them down and release

nutrients. The residual humus improves air and water circulation, aids in water circulation and retention, and contains a diversity of additional nutrients. It's like earning interest on your fertilizer investment.

Compost contains a 3-1-2 nutrient ratio though the percentages in any heap will vary depending on what was added and how it was "worked." The ratio in manure is closer to a balanced formula.

A few other organic fertilizers include wood ash, bone meal, and fish emulsion. During the winter we lightly sprinkle ashes from our wood stove, with a nutrient ratio of 0-2-7, in the flower beds around the house. Potassium slows water loss in plants and aids in disease resistance.

Bone meal, with an approximate 2-20-1 formula, is extremely high in phosphorus, key in bulb development, as in rooted crops such as beets and carrots.

Fish emulsion is made from fishmeal and though it can be a little stinky, it is perfect for giving leafy vegetable crops a boost. Many gardeners swear by foliar application, spraying it directly on plants' leaves.

Some organic gardeners make their own fertilizer "teas" out of manure. The Herb Companion web site swears that the following recipe, used to fertilize new plantings, will have earthworms doing circus tricks in the soil.

Add a small coffee can of rabbit pellets to a five-gallon plastic bucket filled with water. Add a tablespoon of molasses to speed up microbial growth and pour the mixture back and forth into a second five-gallon bucket. Let it sit for three days, pouring it back and forth once a day. Fertilize, and enjoy. 🌱

Wiese-Fales is a writer and member of Boonesboro (Mo.) Christian Church.

Make a sheet mulch bed

by Patrick Whitefield
from *Permaculture in a Nutshell*

There are many ways of using mulch in the garden. One of the most valuable ways is when starting a new garden from scratch on a site full of perennial weeds. A task that looks utterly daunting when you think of digging it becomes quite easy when you use mulch. Here is how to go about it:

Stage 1

Knock the weeds down flat. It is not necessary to cut or remove them. A thin scattering of a high-nitrogen manure, such as blood and bone meal or chicken manure, is helpful at this stage but not essential.

Stage 2

Cover the area with a layer of cardboard, newspaper or other organic sheet material.

The purpose of this layer is to kill the weeds by excluding light. There must be no gaps and plenty of overlap between the pieces, say 20 cm, to prevent vigorous weeds zig-zagging up between them. Big sheets of cardboard are best because you will get fewer joins, and an old carpet is ideal as long as it is made entirely out of natural fibres because everything you use must be able to rot down. Newspaper is only thick enough if you use the whole thing, opened out; do not try to economise by using just a few sheets.

Stage 3

Next comes a layer to weigh the sheets down and provide some nutrients. Manure is ideal (most of our cities are ringed by riding stables which have plenty of it to get rid of), though seaweed will do, or partly rotted compost, provided it is free of weed roots and seeds. The manure does not need to be very well rotted; three months old is sufficient. This layer should be 5 to 10 cm thick.

Stage 4

Now it is time to plant. Potatoes do especially well on this system. Next best are plants which are grown at wide spacings, such as marrows, sweet corn or the cabbage family. Transplants often do better than seeds, as seedlings which have only just germinated can get

buried when birds come and scratch the mulch in search of grubs and insects.

Take a sharp tool, such as an old screwdriver or knife, and stab it through the mulch in the ground. This makes a hole in the sheet layer for the plant's roots to get to the soil below. Scrape away the manure from around the little hole, replace it with a couple of double handfuls of topsoil from elsewhere in the garden, and plant into this. It is not necessary to get the roots down into the soil below the sheet mulch. They will find their own way there.

Water the individual plants well, but do not water the mulch between the plants. As mulch is so efficient at conserving moisture, this is the only watering you will ever need to do, except in a very dry year.

Crops with many small seeds, like carrots, are not suitable. But remember, this system is specifically for opening up new ground. You can grow carrots on this patch next year, or specially dig a piece of ground for them if you cannot wait until then.

Stage 5

Finally, cover the bed with a layer about 20 cm thick of straw or something similar. A mix of grass clippings and fallen tree leaves works well, and most local councils have plenty of both to get rid of. Hay is risky, because it may be full of seeds which will germinate and give you a big weed problem.

If you have planted potatoes you cover the whole area, but seedlings need to be left poking through. If the weather is wet, leave this layer off until the plants have grown big enough to be able to survive the attention of slugs.

Collecting the mulch can take a little time, but it is as nothing compared to the task of digging up all those weeds and picking the pieces of root out of the soil one by one. As well as saving labour and cutting down on water use, sheet mulching is an excellent way of converting some of the

... continued on next page

Take a bite out of hunger one tomato at a time

by Scot Laney

When the members of Murray Hills Christian Church, Beaverton, Ore., discovered that Oregon (like most states) has a troubling hunger problem, they decided to get familiar with the issue. Soon they learned that hunger is much more than an economic issue in the United States. The effects of hunger are also felt in the educational system as well as the workplace. Many gainfully employed people still suffer from food insecurity, and children are going to school with too little to eat—affecting their ability to learn.

Interestingly enough, there is no lack of food in modern American society. The trouble is that the food is not always geographically where it needs to be to aid in hunger relief. This is especially true of perishable foods such as fresh vegetables in an urban area.

To address this dynamic, the Murray Hills Food4People project was launched. If fresh vegetables were needed but hard to get to the food bank, the church would turn the congregation's patios, backyards, and decks into a sort of "virtual" farm where the vegetables could be raised in proximity to the food bank.

About 50 members took part in the first year pilot program raising tomatoes, peppers, squash, beans and other vegetable varieties in pots and small raised beds at home. Once the vegetables were ripe, they were picked and brought to church on Sunday for distribution to the food bank on Monday. By the end of the growing season in 2004, over one ton of fresh vegetables had been raised and delivered.

In 2005 the Food4People vegetables will be

distributed directly from the church's own food pantry and the members have set a goal of 4,000 pounds.

Almost any church could establish its own Food4People program. All you need is a decent growing season, and members willing to tend a few plants at home. Garden vegetables are easy to grow and don't require much care beyond watering and fertilizing.

Hunger is a difficult and pervasive problem in the United States. But we all can help. One tomato at a time. 🍅

Laney is a member of Murray Hills Christian Church, Beaverton, Ore.

You can make food available for all

Join the Foods Resource Bank. Rural and urban congregations partner with Week of Compassion to provide hungry people in the world with the resources they need to eat. For more information, contact Elaine at ecleveland@woc.disciples.org or visit <http://www.foodsresourcebank.org/>.

Participate in National Hunger Awareness Day. Week of Compassion offers excellent resources for congregations. Visit the Web sites, <http://www.weekofcompassion.org> and <http://worldhungerday.org>.

Your meal can travel up to 1,500 miles to your plate. **Gardens can contribute to community food security.** Learn more at <http://www.foodsecurity.org/>. 🍅

(Making Sheet Mulch continued from previous page)

detritus of the throw-away society into soil fertility. 🍅

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Companion planting

by Kay Grimm

Plants are like people. They like to have certain friends they just want to hang with. Their buddies they prefer to grow with help each other to be stronger or by attracting certain insects that would otherwise injure them. Sometimes, like in real life, friendships don't always return favors. So notice who they don't like to grow with and that will make for a happy garden. Be a plant detective and find out why.

To benefit ...	Plant with this ...	But not this ...
Bush beans	Celery, cucumbers, corn, strawberries summer savory	Onions and fennel
Pole Beans	Corn, radishes, summer savory	Sunflower and beets
Broccoli	Beets, chamomile, celery, dill, onions peppermint, potatoes, rosemary, sage	Tomatoes, pole beans, and strawberries
Cabbage	Same as above plus thyme for butterflies and onions for the rabbits	Same as above
Carrots	Lettuce, onions, radishes, tomatoes and sage	Dill
Corn	Beans, cucumbers, peas, potatoes, pumpkin and squash	Tomatoes
Cucumber	Beans, corn, peas, radishes, sunflowers	Potatoes
Lettuce	Carrots, cucumbers, onions, radishes and strawberries	
Onions	Beets, all the cabbage family, lettuce strawberries, summer savory and tomatoe	Peas and beans
Peas	Beans, carrots, corn, cucumber, herbs with fragrance, potatoes, radishes, and turnips	Onions, garlic and gladiolus
Radishes	Good to sow with everything to use as a row marker. They grow fast.	Hyssop, following planting of the cabbage family
Squash	Corn, nasturtium, and radishes	Potatoes
Sunflowers	Corn and cucumbers	Pole beans and potatoes
Tomatoes	Carrots, chives, garlic, marigolds nasturtium, onions, parsley and basil	Corn, fennel, kohlrabi and potatoes

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These flowers ... Attract these bugs ... Which eat these pests ...

Evening primrose	Ground beetle	Moths and maggots
Buckwheat	Tachinid fly	Houseflies, gnats, and aphids
Black-eyed Susan	Green lace wings	Adult beetles, gypsy moths, mealybugs, and thrips
Nasturtiums	Ladybugs	Whiteflies and aphids
Yarrow	Cankerworms, snails, and slugs	Chinch bugs and spider mites

By growing chemical-free gardens, you are:

- building living soils that will be alive with worms and other helpful micro-organisms. The secret is in the soil.
- growing clean, healthy food for yourself and family. A seed is the first step in a healthy food chain.
- helping our groundwater stay pure and clean.
- protecting our air by keeping it clean.
- recycling waste products by composting, thereby saving valuable greenspace.
- reversing global warming by composting, building good soils, planting cover crops and trees.
- providing wildlife habitats by planting safe and necessary food sources from the worms to the birds.
- encouraging diversity by gardening chemical-free.
- honoring sustainable agriculture which is the foundation of our nation.
- inspiring everyone around you to grow chemical-free to heal our Mother Earth.

Grimm is an Indianapolis-area urban farmer, seed saver, Earth-steward and artist. Articles used with permission. For information on buying heirloom seeds, write to Kids in Bloom, Inc., P.O. Box 344; Zionsville, Ind. 46077, or call (317) 290-6996. 🌱

Weeds? Bugs? Sure. Herbicides? Pesticides? No. How to handle "pests"

Caring for our garden becomes an extension of caring for ourselves. We would never consider drinking from a bottle of poison, therefore we should consider eliminating the use of pesticides and herbicides from our gardens. After all, someone has to eat the food we produce.

One way to minimize insect pest problems is to grow healthy plants. If you buy plants, make sure you shop at a reputable nursery. Look over your plants and make sure they appear strong and without spots or blotches on their leaves. To maintain plant vitality, soil that's rich with mulch and compost will provide your plants with the proper nutrients to resist insect infestations and disease. To minimize weeds in your garden, mulch heavily (See "Making a Sheet Mulch Bed."). When you pull weeds, toss them into the compost bin where they biodegrade to become nutrient-rich compost for your plants, and you'll build healthier soil.

maintaining healthy soil and growing healthy plants. Recognize that of the billions of insects on this planet, only a small fraction are considered pests (defined as a plant or animal [which includes insects] detrimental to humans or human concerns [such as our food]). We have learned that no chemical can fully destroy a pest population, instead, pests simply adapt to the poison and grow resistant to it. Furthermore, when we apply chemicals to control insect pests, we kill the good insects. The good insects are the predator insects that feed on the insect pests.

Instead, consider employing the principles of Integrated Pest Management (IPM). IPM is an ecologically-friendly way of managing pests, rather than waging war against them. Many resources are available online regarding IPM. (See list of resources for links to IPM information.) In the end, avoid chemicals. Everyone will be much better off without them. 🌱

So how do we avoid using chemicals? By

Rainwater harvesting needed to promote conservation

by Mike Mecke

For thousands of years, the world has relied upon rainwater harvesting to supply water for household, landscape and agricultural uses.

Before city water systems were developed, rainwater was collected (mostly from roofs) and stored in cisterns or storage tanks. Rainwater is a free source of nearly pure water and too valuable to waste.

Many parts of the world, including Hawaii and Australia, use rainwater as the main source of household water. On many Caribbean islands where rain is the most viable supply, public buildings, homes and resorts all collect rainwater for their needs. Hong Kong collects rainwater from sky scrapers!

In South Texas, the central plazas of towns were not only gathering places, but also the collection surfaces for underground tanks where water was stored for use by adjacent shops and homes. These systems may no longer be in use, but they are clear evidence of the reliance placed on rainwater by early Texans. Unfortunately, as Texans bought windmills or REA provided electric power for wells, the earlier home rainwater harvesting systems were dismantled or forgotten by younger generations.

Today, many Texans are becoming interested again in rainwater harvesting—sometimes out of necessity due to overstressed aquifers and drought-plagued surface water supplies. Several cities in Texas have begun programs to educate the public on RWH. The Lady Bird Johnson Wildflower Research Center near Austin has a large system used for inside potable uses and to irrigate research plots and grounds.



RWH can be used to supply potable (drinkable) water. For potable uses, rainwater must be treated to remove or kill disease organisms that may be present.

For non-potable uses, like watering landscapes or home gardens and orchards, it is ready for use as it falls from the sky.

For livestock, larger systems can be designed to provide supplemental water in a pasture or, in some instances, all of the water required by stock. In Arizona and many of the Western and Rocky Mountain states, RWH systems for livestock are in use on Indian reservations and Forest Service or Bureau of Land Management rangelands, where groundwater is either too deep for windmills or non-existent and surface water is either rare or of poor quality.

Many years ago, I was range manager on the Papago Reservation in southern Arizona, and we watered entire cattle herds from rainwater catchments of an acre or two in size, storing water in large concrete tanks with troughs. For wildlife, small systems called “wildlife guzzlers” can be constructed to promote quail and other wildlife species in water-short areas. Texas Parks & Wildlife Department has many across West Texas—they work! See one at the Chihuahuan Desert Research Center near Fort Davis, Texas, and see two landscape catchment systems for landscape irrigation.

Why use rainwater? Here are some reasons:

- Rainwater harvesting promotes self-sufficiency and an appreciation for water

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(Rainwater continued from previous page)

resources.

- Rainwater harvesting promotes water conservation, providing a “new” water resource.

- Rainwater harvesting saves energy requiring only a small pump or gravity flow.

- Rainwater is one of the purest sources of water.

- Rainwater often has a nitrogen content which provides a slight fertilizing effect.

- Rainwater is soft water for your home. A few commercial rain barrels and a hose will work.

Or clean 55 gallon drums will also do. 🌱

Mecke is a water resources specialist at the Texas Cooperative Extension Center in Fort Stockton. Article used with permission.

Now you know how, but why?

by Angela Herrmann

In this resource, we have provided information on how to start a community garden ... quite frankly, it looks like a lot of hard work. But if you take time to

consider why you want to start down the path of community gardening, your efforts will pale in comparison to the harvests you will reap.



As you can imagine, those harvests will include much more than fresh fruits, vegetables and flowers. Among the reasons to start a community garden include providing healthy produce for local food banks and shut-ins, developing

a community-building project, and planting seeds of food security within local communities.

Some of the benefits of community gardening include creating opportunities for community organizing, reducing crime by getting to know the people around your church and neighborhood, educating young people, creating cultural opportunities, improving the health of those who participate and those who partake in the harvests

Those are some of the obvious reasons. Some of the less obvious benefits will include engaging in an activity that is good for the minds, bodies and spirits of church and community members, developing leadership opportunities (especially for youth), and creating opportunities to get to know people from cultural and religious backgrounds that are different from yours. One study confirms what we already know, "community gardens do get people talking to each other."

In my community garden experience, I have gotten to know many people in my neighborhood through our work together. We are constantly engaged in problem-solving, from one of the more mundane issues of how to handle rabbits in the garden ("Will they eat our plants?" and "How do we avoid running over the baby rabbits with the lawn mower?") to more serious issues of health and safety in dealing with poison ivy that is beginning to spread into the mowed grassy areas, thus raising concern that those mowing will be showered with a mist of poison ivy.

If only rabbits and poison ivy were the only real challenges of all community gardens. In a number of Indianapolis neighborhoods, the problem solving is more complicated. In economically-depressed areas, abandoned homes and empty lots breed frustration, and predatory lending practices perpetuate cycles of poverty. Fresh produce is no longer available because grocery stores have abandoned these communities.

Meanwhile, dedicated cadres of residents have been working diligently in neighborhoods around the city to stop and even turn around the decline. Through community gardens and public art, they challenge the notion that people don't care about their neighborhood, which simply is not the case.

In the end, community gardening is about our care for each other, the earth, our harvest of shared food and friendship, and our presence at the table. After all, the table *is* for everyone.

Sounds a bit like church, don't you think? 🌱

A more food-secure community

by Angela Herrmann

Creating food security in your community begins with everyone's participation. Here are some ideas to get started.

Learn about food security

What does it mean to have a food secure community? What is a food system? Learn more from the Coalition for Community Food Security at <http://www.foodsecuriy.org>. Meanwhile, you can learn about food systems by checking out Cornell University's primer at <http://foodsys.cce.cornell.edu/primer.html>.

Grow your own food ... plant a garden ... (become a master gardener)

Not sure where to start in your yard? Befriend a gardener or enroll in a master gardener's class. Master gardeners learn the horticultural basics, and grow by sharing and volunteering in their communities.

Join or start a community garden

Contact your Extension office to find a community garden near you or start one. All you need is a large piece of ground (and permission to use it). For information on community gardening, visit the American Community Gardening Association Web site at <http://www.communitygarden.org>. If you start a community garden, then one of the first things you'll want to do is get the soil tested. In older neighborhoods, lead sometimes shows up in the soil. And master gardeners are always available to volunteer!

Plant a Row

A program of the Garden Writers Association, Plant a Row (PAR) for the hungry allows you to share your abundance with those in need. Simply donate your extra produce to any church or agency that offers food relief in the community ... or if you know someone who could use a little extra, pass it on. Inmates at the Indiana Women's Prison have participated in PAR for several years, donating nearly 1,000 pounds of organically-grown fresh produce over the past three years. Learn more at <http://www.gardenwriters.org/Par/index.html>. Locate food relief centers to make your donations of fresh produce.

Grow your garden organically

For the safest, healthiest harvests, grow your garden organically and sustainably by creating richer soil and attracting beneficial insects. Understand the intricate relationships between plants, insects, and soil. Visit the National Sustainable Agriculture Information Service at <http://attra.org/>.

Become a beekeeper

Did you know you can keep bee hives in your back yard? Just make sure you talk with your neighbors first and make sure you are not violating community ordinances! For information, contact your county Extension service. (Check resources to find your local Extension office.)

Support a farmer

Shop at farmers' markets or join a CSA. For a list of CSAs and markets, visit the Local Harvest Web site at <http://www.localharvest.org> for CSAs and <http://www.ams.usda.gov/farmersmarkets/> for a list of markets.

... or start a farmers' market

Does your church have a large open space? If you don't already have a farmers' market, then maybe it's time to start one. The University of Florida offers a guide to starting markets at <http://edis.ifas.ufl.edu/FY639>.

Save your seeds

How many of us actually start our plants from seed ... let alone save the seed? People don't realize that seeds are the beginning of the food chain. Without good seed, we won't have good food. Heirloom seeds represent diversity that does not exist in our food system because these seeds have not been genetically modified. Learn more at http://www.fedcoseeds.com/seeds/why_save_seeds.htm or download *Seed Saving*, a publication of Fedco Co-op, at <http://www.fedcoseeds.com/forms/seedschool.pdf>.

Start a food cooperative

Begin simple, with say, organic free-range eggs

... continued on next page

or meat. Start with your circle of friends or co-workers. Develop a relationship with a farmer (Food secure continued from previous page)

who would then provide the products for you and your group on a regular basis at a mutually agreed upon price. Start with market farmers to find someone who can work with your co-op.

Enjoy the seasonal bounty

Find easy to use recipes in *Simply In Season* (World Community Cookbook) by Mary Beth Lind, or *The Victory Garden Cookbook* by Marian Morash .

Enjoy the seasonal bounty next winter

Learning to preserve food can be quite rewarding — while it sometimes can take some time and effort, share the workload with your family or a couple of friends, then share a meal or two next February. The book *Putting Food By*, by Janet Greene, is a reliable resource.

Open a community kitchen

Most churches have commercial kitchens. What better place to gather and preserve food?

Always vote with your dollars

Every time you buy local, you are helping construct a local food infrastructure that enables more small farmers to provide excellent food that hasn't traveled across the country from field to table. Think it's not possible? For some ideas, visit <http://www.100milediet.org> or <http://www.foodroutes.org>.

Call on elected officials to make your city more food secure

During the 1940s, 44 percent of Americans ate locally produced food, while today, that number has fallen off to 1 percent. A number of U.S. city government officials are calling on their citizens to eat locally, thus enhancing food security by reducing their dependence on 1,500-mile meals. One of the most ambitious plans comes from Oakland, Calif. In January 2006, the Oakland City Council approved a plan to produce 30 percent of its food locally. 🌱

Article revised from that which originally appeared in NUVO Newsweekly, Indianapolis, May 30, 2007.

Cooperating with nature

Have you ever taken time to observe nature ... to simply watch and learn? What if, in those observations, you began to uncover some patterns, some ways of working in your garden, or around your home or church, that mimic nature's way of doing things?

In your observations, you might notice a few things ... that nature does not leave the soil unprotected or uncovered ... that in a forest, layers of plant detritus build and nourish the soil ... that edges, such as forest, pond, or field edges, are home to the most plant and animal activity in a natural system that you'll seldom find in monoculture stands of a single plant in an ecosystem ... that the plants we consider weeds may actually serve a purpose.

A tomato plant does not happen in a vacuum. It requires the cooperation of entire communities of organisms for its survival. Healthy soil is home to billions of microorganisms that interact with the plant's roots and aid its growth. Insects aid in pollination. The sun and rain feed the plant.

Through the learning and practice of permaculture, we can begin to understand the systems that support life and thus act accordingly in our garden and in our lives.

The word "permaculture" was coined by Bill Mollison after work he had done evolving "a framework for a sustainable agricultural system."

Mollison described permaculture as "a beneficial assembly of plants and animals in relation to human settlements, mostly aimed towards household and community self-reliance, ..." (Mollison, in "Preface to Introduction to Permaculture").

In a time of uncertain weather patterns and increasingly degraded ecosystems, the practice of permaculture enables us to rethink how we engage the Earth. By applying the three-fold ethic of permaculture—care of the Earth, care of people, and the fair shares (share surplus and accept limits to consumption and population), we learn to cooperate with nature rather than dominate or control it. As Japanese farmer, Masanobu Fukuoka, said, "If we throw mother nature out the window, she comes back in the door with a pitchfork."

To learn more about permaculture, visit the Resources section of this publication. 🌱

Resources

Local resources

Garden clubs, horticultural societies, garden centers
Cooperative Extension Services, or Master Gardeners
in the United States

<http://www.csrees.usda.gov/Extension/> or
http://www.ahs.org/master_gardeners/

Community gardening

American Community Gardening Association
<http://www.communitygarden.org/>

City Farmer (an urban agriculture classic)
<http://www.cityfarmer.org/>

From ACGA:

- *Creating Community Gardens: A Handbook for Planning and Creating Community Gardens to Beautify and Enhance Cities and Towns.*
- *Agreement for Community Gardening: Sample Form*
- *Garden Planning for City Lots: Basic site evaluation*
- *Liability Insurance*
- *How to Form a 501c(3): Is it necessary?*
- *Community Gardening Survey*
- Community Gardening bibliography of related articles and publications
- Case Studies of Entrepreneurial Community Greening Projects
- More at <http://www.communitygarden.org/>.

The Garden (film): <http://www.blackvalleyfilms.com/>

Gardening with children

Childrens' gardens
<http://aggie-horticulture.tamu.edu/kindergarden/child/cgintro.htm>

Kids Gardening: <http://www.kidsgardening.com/>

Plants

Local nurseries
Vocational-Tech Horticulture Departments
High school/College Horticulture classes
Parks Departments

Web Garden

Includes searchable plant and pest databases.
<http://webgarden.osu.edu/>

UConn Plant database

<http://www.hort.uconn.edu/plants/>

U.S. Native Plant database

<http://plants.usda.gov/>

Seeds

Fedco Co-op: <http://www.fedcoseeds.com/>
(207) 873-7333

Seed Savers: <http://www.seedsavers.com>

The Seed Giants—Who Owns Whom?

www.victoryseeds.com/information/RAFI_Alerts/masterseed2000.pdf

Insects and weeds

University of California Integrated Pest Management: <http://www.ipm.ucdavis.edu/>

IPM for the Home Vegetable Garden

<http://ohioline.osu.edu/hyg-fact/2000/2205.html>

Iowa State Entomology

<http://www.ent.iastate.edu/list/>

UC IPM online: <http://www.ipm.ucdavis.edu/>

Washington State IPM: <http://ipm.wsu.edu/>

Earth care

Biodynamic Farming & Gardening Association
<http://www.biodynamics.com/>

Bioneers: www.bioneers.org

Gaia's Garden: Home-Scale Permaculture by
Toby Hemenway and John Todd

Nature Challenge Calculator (Canada)

<http://www.davidsuzuki.org/NatureChallenge/>

Permaculture

<http://en.wikipedia.org/wiki/Permaculture>

Permaculture: A Designers' Manual and
Introduction to Permaculture by Bill Mollison

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Food security

Bread for the World: <http://www.bread.org/>

Community Food Security Coalition
<http://www.foodsecurity.org>

Foods Resource Bank
<http://www.foodsresourcebank.org/>

Food First: <http://www.foodfirst.org/>

Plant a Row for the Hungry
<http://www.gardenwriters.org/>

Food: Sustainable and local

100-Mile diet: <http://www.100milediet.org>

"Eating Away at the Environment," article published in *DisciplesWorld*, April 2007.

Environmental Commons
<http://www.environmentalcommons.org/LocalFood/index.html>

Food Fight: The Citizen's Guide to a Food and Farm Bill by Daniel Imhoff

Food Not Lawns: How to Turn Your Yard into a Garden And Your Neighborhood into a Community by Heather C. Flores

Healthy Food, Local Farms Conference
<http://www.ngfn.org/events/10th-annual-healthy-foods-local-farms-conference>
November 6, 2009, Louisville, Ky.

In Defense of Food by Michael Pollan

Kitchen Garden Planner
http://www.gardeners.com/Kitchen-Garden-Planner/kgp_home,default.pg.html

Local Harvest: <http://www.localharvest.org/>

The Meatrix (film): www.themeatrix.com

The Revolution Will Not Be Microwaved: Inside America's Underground Food Movements by Sandor Ellix Katz

Slow Food U.S.A.: <http://www.slowfood.com>

The Sustainable Table
<http://www.sustainabletable.org/>

Quality of life

Redefining Progress
<http://www.redefiningprogress.org>

Sustainable Economics
<http://www.sustainableeconomics.org>

Biblical grounding

Earth Gospel: A guide to prayer for God's creation. compiled by Sam Hamilton-Poore

EnviroJustice
<http://www.envirojustice.org/>

Food and Faith: Justice, Joy and Daily Bread
edited and compiled by Michael Schut

Interfaith Power and Light
<http://www.theregenerationproject.org/>

National Council of Churches of Christ Eco-Justice
<http://www.ncccecojustice.org/>

To Heal the Earth: A Theology of Ecology
Frederick Quinn

Web of Creation
<http://www.webofcreation.org/>

Continue the conversation

Join the discussion group and connect with Disciples engaged in community gardening and food security.
<http://groups.yahoo.com/group/DisciplesReturnToTheGarden/>

Learn more

For more information, contact Angela Herrmann at (317) 713-2683 or aherrmann@dhm.disciples.org.

More information is available online at www.discipleshomemissions.org.

